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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/482,679	01/14/2000	Uwe Heitmann	31653-152135	7334

26694 7590 01/08/2003

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EXAMINER

LOPEZ, CARLOS N

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 01/08/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/482,679	Applicant(s) HEITMANN, UWE	
	Examiner Carlos Lopez	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-9 and 11 is/are rejected.
- 7) ☒ Claim(s) 2 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

The amendment filed on 11/06/02 has been entered as Paper No. 17. The amendment obviates the 35 U.S.C. 112 2nd rejections made to claims 1,2 and 4-7.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 1) Claims 4-7 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4-7 and 11 recite the limitation "the concave sliding surface" in claim 11 line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 2) Claims 1 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Orihara et al (US 5,967,146) in view of Stephan et al (US 5,941,520) and in further view of King Jr. (US 4,306,358). Orihara discloses a shredded tobacco supplying apparatus for a cigarette-manufacturing machine (Columns 7-9). The tobacco supplying apparatus comprising of a concave-curved guide track (38); guide track having a generatrix based on a uniform generating curve sections 38a and interrupted

by a plurality of nozzles (40,42,44) (Fig. 3). The guide track (38) comprises of track segments having sections wherein the borders of the track segments provide an upstream and down stream nozzle walls for which air jets (43) flow through. Orihara is silent disclosing the down stream wall that forms the nozzles as being steady convex curvature. However, Stephan et al, disclosing nozzle 4 providing a conveying current, teaches of having a convex curvature as shown in figure 3 at the down stream wall of a nozzle 4 in order to reduce the negative pressure or turbulence in the conveying air current created by the nozzle 4 (Column 3, lines 23-32). Hence, Stephan et al reduces turbulence created by the nozzle 4 by providing a convex curvature at the down stream wall forming nozzle 4 which would provide a more uniform conveying current by reducing vacuum zones or negative pressures. Orihara discloses that having a uniform layer of tobacco fibers is necessary to maintain constant filling density (Column 12, lines 30-44). A conveying current having turbulence created by negative pressures/vacuum zones would not effectively provide a uniform tobacco layer needed to provide a constant filling density. Thus at the time the invention was made, it would have been obvious to a person ordinary skill in the art to form the down stream wall of Orihara's nozzles in a convex curvature to reduce vacuum zones and negative pressures as taught by Stephan et al in order to provide a more uniform conveying current resulting in less variations of the filling density of the cigarettes being made.

Claims 1 and 8 additionally recite that the air leaving the nozzle achieves the Coanda effect. As disclosed by King, the Coanda effect is a natural phenomena of reattachment of fluid jets to smooth boundary surfaces (Column 7, lines 32-37). The

surface of the guide is assumed to be smooth in order to provide a uniform conveying air jet and thus a Coanda Effect would occur on the guide track.

Response to Arguments

Applicant's arguments filed 11/6/02 have been fully considered but they are not persuasive.

The argument presented that a Coanda effect will not be achieved due to that geometrical configuration of Stephan's nozzle (Last Paragraph, Page 5) is not supported by Stephan nor any submitted evidence by Applicant.

Applicant additionally presents arguments that the present invention "intentionally creates vacuum zones of the Coanda effect to aid in conveyance of particles" and that "the tobacco particles are sucked into the air exiting from the nozzles and are accelerated". However, said distinctions are neither claimed by Applicant nor supported by the specification.

Applicant also argues that Stephan's nozzles only provides an air jet having a steep vertical component and that said air jet's horizontal component is the result of the paper sheet being conveyed in Stephan's conveyor. However, as shown in column 1, lines 63-64 of Stephan, the air jet include a horizontal component in order to transport the sheet. Thus the horizontal component of the air jet does is not a result of air being deflected by Stephan's sheet as alleged by Applicant. The horizontal component of the Stephan would be sufficient to move a tobacco particle in a horizontal direction.

Applicant present arguments towards claim 8, that the Examiner in a previous Action argued that claim 1 did not distinguish over the sliding surface of Orihara. It is

unclear to which Action Applicant is referring to since claim 1 has always been maintained to be unpatentable over Orihara.

Applicant additionally argues that the guide track made of discrete track elements as recited in claim 9 distinguishes it over the Orihara reference. It is held that elements such as guide track sections 38a, guide track pin 66 and guide track cylinder 67 are other discrete elements of the guide track 38 of Orihara.

Allowable Subject Matter

Claims 4-7 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Claim 2 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art does not disclose or reasonably suggest a continuous nozzle extending the width of the guide track as recited in claims 2, 4-7, 10 and 11 and having a convex curvature down stream wall that forms the air supplying nozzles. The closest prior art Orihara et al (US 5,967,146), provides discontinuous nozzles over the width of the guide track.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

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C.L
January 4, 2003


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
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